Discussion of Analysis Plans/Tasks

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October 19,1999

Near Term Goals (3 months)

- Double number of located neutrino interactions
  - ~200 $\rightarrow$ ~400
- Improve efficiency of decay search
  - Especially for short decays
- Fully analyze candidate and other "special events"
  - Emulsion spectrometer track matching
  - Daughter momentum analysis
    - Spectrometer or Multiple Scattering
  - Parameter probability analysis
- Continue analysis of muon and electron events
  - Spectrum
  - Neutrino Parameters ($\Delta\Phi$, E_{vis})

Location/Scanning Status

Module	1	2	3	4	5	7	8	
Station	1	2	3	4	1	3	4	Totals
Located	**33**	**41**	**17**	**15**	**23**	**34**	**39**	**202**
Scanned/not located	**8**	**16**		**6**	**7**	**21**	**4**	**62**
Scanned/not analyzed	**34**	**30**	**6**	**20**	**19**	**23**	**18**	**150**
Not Scanned/NET	**50**	**39**	**49**	**57**	**16**	**39**	**10**	**260**
Not Scanned/CS	3	6	16		7	9	10	51
Not Neutrinos	44	30	2	28	40	23	24	191
Totals	172	162	90	126	112	149	105	916

We are considering 725 neutrino interactions.
414 (57%) have been scanned.
49% of the scanned events have been located.

The most important task at the present time is to make vertex predictions for the 260 Not Scanned/NET events.

Event Location

- Classes of Events
  - A. Never Scanned
    - Easy
    - Hard
  - B. Scanned but not located
    - Correct volume
    - Incorrect volume
- Plan
  - Class A events :
    - $E872LISTS/pass3_m*n*.lis
    - *n* 1,2,3,4,5,7,8
  - Class A : Byron, Vittorio + ??
    - Each person needs to produce ~15 refit vertex predictions per week
    - Refitters will sort and prioritize events
  - Class B : Gina + ??
    - We need to determine quickly which events have the wrong volume so they can get back into the scanning que

Event Analysis

- Spectrum
  - Muons
  - Electrons
- Emulsion/spectrometer track matching
- Decay Search
- Candidate Event Parameters $\rightarrow$ Probability
  - Neutrino angle
  - Delta phi
  - Decay length
  - Kink angle
  - Daughter momentum
- ν_μ / ν_e distributions
  - $\Delta\Phi$
  - $E_{vis} \rightarrow y_{vis}$